

Listing of Claims:

1-11. (canceled) .

12. (previously amended) A sensor for sensing position of a moveable object,
comprising:

 a magnet attachable to the object, the magnet having a pair of ends and a central portion, the magnet generating a slowly changing flux field near the central portion and a rapidly changing flux field at the ends;

 a first magnetic flux sensor positioned about the central portion of the magnet, the first magnetic flux sensor generating an electrical signal indicative of a specific position of the movable object; and

 a second magnetic flux sensor positioned about the first end of the magnet, the second magnetic flux sensor generating an electrical signal indicative of when the movable object has reached a pre-determined location.

13. (canceled).

14. (previously amended) The sensor according to claim 12 wherein, the first and second magnetic flux sensors are hall effect devices.

15. (original) A sensor for sensing movement of a movable object, comprising:
- a) at least one magnet attachable to the movable object, the magnet having a first end, a second end and a central portion;
 - b) the first and second ends of the magnet having a first flux density that changes about the ends;
 - c) the central portion of the magnet having a second flux density that changes more slowly about the central portion than about the ends of the magnet;
 - d) a first magnetic flux sensor positioned about the central portion of the magnet, the first magnetic flux sensor generating a first electrical signal indicative of a specific position of the movable object; and
 - e) a second magnetic flux sensor positioned about the first end of the magnet, the second magnetic flux sensor generating a second electrical signal indicative of the movable object reaching a pre-determined location.
16. (original) The sensor according to claim 15 wherein, the second magnetic flux sensor functions as a first switch.
17. (original) The sensor according to claim 15 wherein, a third magnetic flux sensor is positioned about the second end.
18. (original) The sensor according to claim 17 wherein, the third magnetic flux sensor functions as a second switch.

19. (original) The sensor according to claim 15 wherein, the first electrical signal is linear.

20. (original) The sensor according to claim 15 wherein, the second electrical signal is step shaped.

21-23. (canceled).